Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 2-5 and 9-10 are pending in the application. Claims 1-3 and 9 have been amended. Support for the amendment can be found throughout the specification and original claims. For example, support can be found in the specification at page 5, line 28 to page 6, line 18, and Figures 1, 3, 6, 7 and 8. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 2-5 and 9-10 under 35 U.S.C. §112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. (Paper No. 28, page 2.) Specifically, the Examiner has stated that:

Since Applicant does not disclose nor claim the full length amino acid sequence for the 20kDa presenilin-2 protein and molecular weight is the only standard defining the protein, a recitation of the method used to measure the molecular weight is necessary because different molecular weight measurements of the same protein give different molecular weights.

(*Id.*) Applicants respectfully traverse the Examiner's rejection.

Solely to advance prosecution and not in acquiescence to the Examiner's rejection, Applicants have amended the claims to recite a method of determining the molecular weight of the 20kDa presenilin-2 C-terminal fragment. Applicants assert that the amendment renders moot the Examiner's concerns about indefiniteness. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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SKGF Rev. 4/9/02

Version with markings to show changes made

The application is sought to be amended as follows:

In the Claims:

- 1. (Amended) A purified 20 kDa presenilin 2 C-terminal fragment (PS2-CTF), wherein the molecular weight of said PS2-CTF is determined by a polyacrylamide gel electrophoresis/western transfer procedure.
- 2. (Thrice amended) An antibody having binding that is specific to a purified 20 kDa presenilin-2 C-terminal fragment (PS2-CTF), wherein the molecular weight of said PS2-CTF is determined by a polyacrylamide gel electrophoresis/western transfer procedure, and wherein said antibody does not bind presenilin-2.
- 3. (Amended) A method of detecting 20 kDa PS2-CTF, wherein the molecular weight of said PS2-CTF is determined by a polyacrylamide gel electrophoresis/western transfer procedure, in a sample[,] comprising:
 - a) contacting said sample with an antibody according to claim 2, under conditions such that immunocomplexes form, and
 - b) detecting the presence of said antibody bound to said polypeptide.
- 9. (Amended) A method for screening compounds that inhibit proteolytic processing of presenilin 2 in a cell comprising (a) providing a compound to a cell, wherein the cell proteolytically processes presenilin 2, (b) measuring the amount of 20 kDa presenilin 2 C-terminal fragment (PS2-CTF) produced in said cell, and (c) comparing said amount produced to an amount of PS2-CTF produced in a cell not treated with said compound, wherein a decreased amount of 20 kDa presenilin 2 fragment in said cell treated with said compound as compared to a cell not treated with said compound indicates that said compound inhibits proteolytic processing of presenilin 2 in said cell, wherein the molecular weight of said PS2-CTF is determined by a polyacrylamide gel electrophoresis/western transfer procedure.